



Rome, Italy

The city of Rome is home to some 2.8 million people, 1.96 million cars and 550,000 motorcycles and motor scooters. The travel mode of choice in Rome is 52% private vehicles, 15% powered two-wheelers (PTWs) and 33% for public transport and walking/cycling. The pressures of so many people and vehicles have created two interrelated problems: traffic congestion and environmental degradation.

and essential users (many of whom must pay a yearly charge) and are supported by paid parking schemes in surrounding areas in order to forbid access to cars and increase the supply of public transport as much as possible. The revenues must be used to redress the environmental externalities arising from traffic pollution and to invest in new public transport infrastructure.

Why was urban road user charging introduced in Rome?

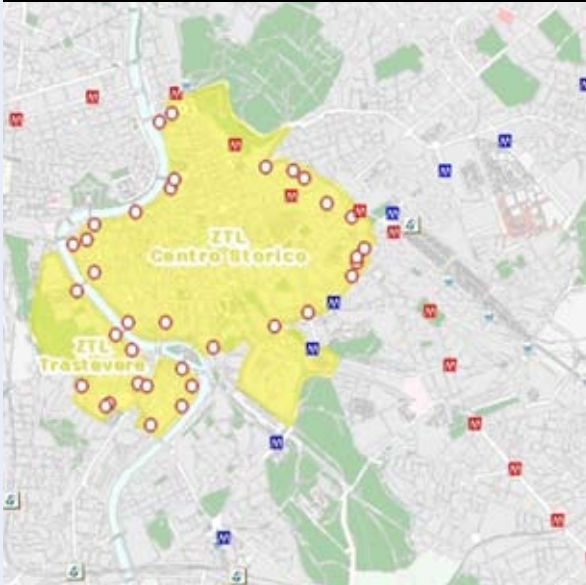
The pricing policies in place in Rome include both payment for on-street parking and payment for accessing certain areas of the city. The main objective pursued since the implementation of access policies in Rome, going back to the late 1980, has been the protection of the unique cultural heritage of the city from the effects of traffic pollution.

The turning point was the establishment of limited traffic zones (LTZs) with "electronic gates" in October 2001. LTZs are used to restrict vehicle access to residents

What are the features of the Rome scheme?

The scheme implemented in Rome foresees that in principle people or residents working inside the LTZ areas can have access by car if they register and purchase a permit. There are a number of exemptions, including local public transport, taxis and disabled people. The historical city centre LTZ subsystem, operating from October 2001, encompasses 23 gates on access roads to the city centre. These optically detect the plates of vehicles through automatic plate number recognition (APNR) technology: a picture of the plate is taken and sent to the control centre.

The daily LTZ Scheme in Rome



The ANPR compares each plate number to the “White List” database. If there is a mismatch, a fine is automatically issued to that plate.

Once the automatic system had been tested and fine tuned, other “sensitive areas” and “sensitive time bands” were identified and a decision to limit car traffic has been issued and implemented according to a daily and night scheme.

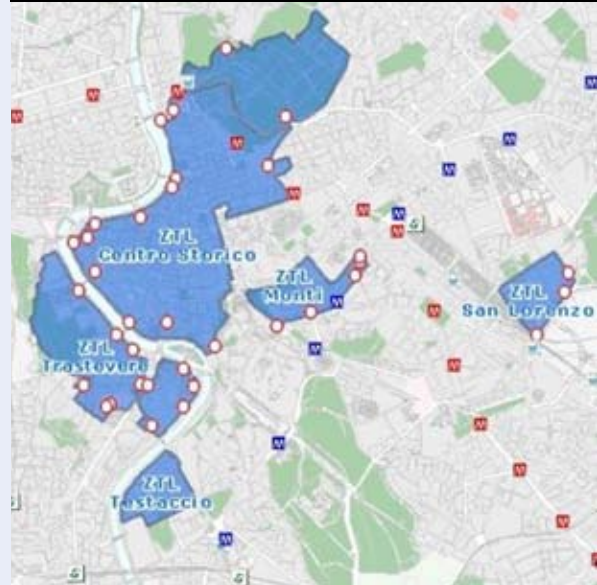
How was the Rome scheme implemented?

Rome’s request was the first in the nation for an access control system and road user charging (ACS+RP) scheme. The government bodies examined it carefully and established the parameters for its operation. Due to the complexity of procedures needed for the first launch of such system on Italian soil, the government mandated a preliminary trial to be jointly operated by the Urban Police, who would station a traffic officer at each gate to confirm violations. Romans got used to the system and came to consider it a part of the city infrastructure. It was decided to use the system to enforce a paper-permit-based framework that had been in place from 1994, though not enforced.

Impacts of the Rome scheme

Access during restriction period was decreasing about 20% and it is now stable around 70,000 vehicles per day. Air pollution levels recorded in 2001 and 2004 showed

The nightly LTZ Scheme in Rome



a reduction of CO concentration by 21%, PM10s by 11% and benzene by 37%. An analysis on the yearly values in three air quality stations (located inside the historical centre LTZ, outside the LTZ on a “traffic location” and a background station), shows also that the inside LTZ site, differently from the others, experienced a decrease of more than 30% in PM10 values from 2001 to 2008.

Moreover, during some hours of the day, it is possible to walk on streets that are free of privately-owned vehicles. The better liveability inside the zones has increased the value of real estate and enhanced commercial activity. On the other hand the LTZs exacerbated the safety from two-wheelers. In fact, the ratio between PTWs and all accidents has increased. A cooperative effort between cities, industry and universities within the eSUM (European Safer Urban Motorcycling) project, co-financed by DG TREN, should foster a continuous reduction in PTW accidents with an integrated European approach.

Conclusion

The introduction of mini-VMS at the gates as well as the ATAC Mobile solution was appreciated by city users, with a more careful understanding of the LTZ rules. Further road user charging related activities will concern the access control of coaches by following their complete path within the city centre, to be priced according to their use of the city. Finally, a comprehensive investment in parking pricing will increase the use of flexible parking fees and innovative payment systems

